217/782-2113

"REVISED"
TITLE V - CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT
and
TITLE I PERMIT[1]

PERMITTEE

BP Naperville Complex
Attn: J. L. Saylor
150 Warrenville Road
Naperville, Illinois 60563

Application No.: 95120161 I.D. No.: 043065AAG
Applicant's Designation: Date Received: December 11, 1995
Operation of: Research and Development Center
Date Issued: November 20, 2002 Expiration Date[2]: November 20, 2007
Source Location: 150 West Warrenville Road, Naperville, DuPage County
Responsible Official: Cherie Duddridge, Naperville Site Manager

This permit is hereby granted to the above-designated Permittee to OPERATE a research and development center, pursuant to the above referenced permit application. This permit is subject to the conditions contained herein.

Revision Date Received: April 21, 2003
Revision Date Issued: TO BE DETERMINED
Purpose of Revision: Minor Modification

This minor modification changed the responsible official and name for written correspondence. The owner and operator has been changed. The insignificant activities have been updated. Construction Permits 00070002, 00080035, 01090025, 02050084 and 03070062 were incorporated into this permit. Storage tanks descriptions have been updated. Permit Condition 7.4.7 has been modified slightly for clarity. Typographical errors have been corrected.

If you have any questions concerning this permit, please contact David Hulskotter at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:DWH:psj

cc: Illinois EPA, FOS, Region 1

[1] This permit may contain terms and conditions which address the applicability, and compliance if determined applicable, of Title I of the CAA and regulations promulgated thereunder, including 40 CFR 52.21 – federal PSD and 35 IAC Part 203 – Major Stationary Sources Construction and Modification. Any such terms and conditions are identified within this permit.

[2] Except as provided in Condition 8.7 of this permit.

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1.0 SOURCE IDENTIFICATION

1.1 Source

BP Naperville Complex
150 West Warrenville Road, F-3/HSE
Naperville, Illinois 60563
708/420-4874

I.D. Number: 043065AAG
Standard Industrial Classification: 8734 Research and Development

1.2 Owner/Parent Company

Amoco Research Operating Company
150 West Warrenville Road, F-3/HSE
Naperville, Illinois 60563

1.3 Operator

BP Corporation North America, Inc.
BP Amoco Chemical Company
150 West Warrenville Road, F-3/HSE
Naperville, Illinois 60563

Operator Contact: James L. Saylor
Contact Phone No.: 630/420-4874

1.4 General Source Description

The BP Naperville Complex is a multi-building research complex dedicated to the creation and development of new products, techniques and processes; the improvement of current products and uses; and the performance of a wide variety of activities designed to increase the profitability of BP. The research complexes house numerous bench scale laboratories and pilot scale test equipment. The “A” Building contains one cogeneration facility and four boilers for providing electricity and steam to adjacent research buildings. Much of the site is used to provide office space for BP’s commercial business personnel.

2.0 LIST OF ABBREVIATIONS/ACRONYMS

acfm	Actual cubic feet per minute
ACMA	Alternative Compliance Market Account
Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711
ATU	Allotment Trading Unit
BAT	Best Available Technology
Btu	British thermal unit
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CAM	Compliance Assurance Monitoring
CFR	Code of Federal Regulations
ERMS	Emissions Reduction Market System
°F	degrees Fahrenheit
ft^3	cubic foot
Gal	gallon
HAP	Hazardous Air Pollutant
hr	hour
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
IFR	Internal Floating Roof
ILCS	Illinois Compiled Statutes
Illinois EPA	Illinois Environmental Protection Agency
ISO	International Standard Organization
°K	degrees Kelvin
Kg	kilogram
kW	kilowatts
LAER	Lowest Achievable Emission Rate
lb	pound
m	meter
MACT	Maximum Achievable Control Technology
mmBtu	Million British thermal units
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standards
OM	Organic Material
PM	Particulate Matter
PM_{10}	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
ppm	parts per million
PSD	Prevention of Significant Deterioration
psia	pounds per square inch absolute
RMP	Risk Management Plan
SO_2	Sulfur Dioxide
T1	Title I – identifies Title I conditions that have been carried over from an existing permit

T1N	Title I New – identifies Title I conditions that are being established in this permit
T1R	Title I Revised – identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compounds
VOL	Volatile Organic Liquid
VOM	Volatile Organic Material
wt	weight
yr	year

3.0 INSIGHNIFICANT ACTIVITIES

3.1 Identification of Insignificant Activities

The following activities at the source constitute insignificant activities as specified in 35 IAC 201.210:

3.1.1 Activities determined by the Illinois EPA to be insignificant activities, pursuant to 35 IAC 201.210(a)(1) and 201.211, as follows:

Wastewater Pretreatment
Fume Hoods for Spent Solvent Loading
Air Stripper
Catalyst Screen Experimental Equipment
Cold Degreaser
General Purpose Hydroprocessing Experimental Equipment
Toluene Disproportionation Experimental Equipment
MC Oxidation TA Experimental Equipment
Butane Oxidation Experimental Equipment
Maleic Anhydride Experimental Equipment
Low Temperature Crystallization Experimental Equipment
Aromatics Experimental Equipment
Ethylbenzene Dehydrogenation Experimental Equipment
MC Oxidation Experimental Equipment
Gas to Liquid Experimental Units
Niro Dryers
Lab Furnace
Laboratory-Scale Nitriles Research Units
Laboratory-Scale Research Units
Reactors (5 to 20 gallons) for Catalyst Preparation
Bowen Spray Dryer
Calcining-Rotary Calciner
Calcining-Ball Milling
Calcining-Screening
Catalyst Evaluation Unit
Aromatic PRU Unit

3.1.2 Activities that are insignificant activities based upon maximum emissions, pursuant to 35 IAC 201.210(a)(2) or (a)(3), as follows:

Sulfuric Acid Tanks
Catalyst Spray Dryers
Experimental Research Unit
PTA Experimental Equipment
MC Oxidation Experimental Equipment
Distillation Experimental Equipment
Polyester Experimental Equipment
Catalytic/Thermal Oxidation Experimental Equipment
Catalyst Testing Hydrogenation Experimental Equipment
Polyolefin Experimental Equipment
Pyrolysis Furnaces

3.1.3 Activities that are insignificant activities based upon their type or character, pursuant to 35 IAC 201.210(a)(4) through (18), as follows:

Direct combustion units designed and used for comfort heating purposes and fuel combustion emission units as follows: (A) Units with a rated heat input capacity of less than 2.5 mmBtu/hr that fire only natural gas, propane, or liquefied petroleum gas; (B) Units with a rated heat input capacity of less than 1.0 mmBtu/hr that fire only oil or oil in combination with only natural gas, propane, or liquefied petroleum gas; and (C) Units with a rated heat input capacity of less than 200,000 Btu/hr which never burn refuse, or treated or chemically contaminated wood [35 IAC 201.210(a)(4)].

Extruders used for the extrusion of metals, minerals, plastics, rubber, or wood, excluding extruders used in the manufacture of polymers, provided that volatile organic materials or class I or II substances subject to the requirements of Title VI of the CAA are not used as foaming agents or release agents or were not used as foaming agents in the case of extruders processing scrap material [35 IAC 201.210(a)(5)].

Storage tanks of organic liquids with a capacity of less than 10,000 gallons and an annual throughput of less than 100,000 gallons per year, provided the storage tank is not used for the storage of gasoline or any material listed as a HAP pursuant to Section 112(b) of the CAA [35 IAC 201.210(a)(10)].

Storage tanks of any size containing virgin or re-refined distillate oil, hydrocarbon condensate from natural gas pipeline or storage systems, lubricating oil, or residual fuel oils [35 IAC 201.210(a)(11)].

Die casting machines where a metal or plastic is formed under pressure in a die [35 IAC 201.210(a)(12)].

Coating operations (excluding powder, architectural and industrial maintenance coating) with aggregate VOM usage that never exceeds 15 lbs/day from all coating lines at the source, including VOM from coating, dilutents, and cleaning materials [35 IAC 201.210(a)(13)].

Gas turbines and stationary reciprocating internal combustion engines of less than 112 kW (150 horsepower) power output [35 IAC 201.210(a)(15)].

Gas turbines and stationary reciprocating internal combustion engines of between 112 kW and 1,118 kW (150 and 1,500 horsepower) power output that are emergency or standby units [35 IAC 201.210(a)(16)].

Storage tanks of any size containing exclusively soaps, detergents, surfactants, glycerin, waxes, vegetable oils, greases, animal fats, sweeteners, corn syrup, aqueous salt solutions or aqueous caustic solutions provided an organic solvent has not been mixed with such materials [35 IAC 201.210(a)(17).

3.1.4 Activities that are considered insignificant activities pursuant to 35 IAC 201.210(b).

3.2 Compliance with Applicable Requirements

Insignificant activities are subject to applicable requirements notwithstanding status as insignificant activities. In particular, in addition to regulations of general applicability, such as 35 IAC 212.301 and 212.123 (Condition 5.2.2), the Permittee shall comply with the following requirements, as applicable:

3.2.1 For each cold cleaning degreaser, the Permittee shall comply with the applicable equipment and operating requirements of 35 IAC 218.182.

3.2.2 For each particulate matter process emission unit, the Permittee shall comply with the applicable particulate matter emission limit of 35 IAC 212.321 or 212.322. For example, the particulate matter emissions from a process emission unit shall not exceed 0.55 pounds per hour if the emission unit's process weight rate is 100 pounds per hour or less, pursuant to 35 IAC 266.110.

3.2.3 For each organic material emission unit that uses organic material, e.g., a mixer or printing line, the Permittee shall comply with the applicable VOM emission limit of 35 IAC 218.301, which requires that organic material emissions not exceed 8.0 pounds per hour or do not qualify as photochemically reactive material as defined in 35 IAC 211.4690.

3.3 Addition of Insignificant Activities

3.3.1 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type that is identified in Condition 3.1, until the renewal application for this permit is submitted, pursuant to 35 IAC 201.212(a).

3.3.2 The Permittee must notify the Illinois EPA of any proposed addition of a new insignificant activity of a type addressed by 35 IAC 201.210(a) and 201.211 other than those identified in Condition 3.1, pursuant to Section 39.5(12)(b) of the Act.

3.3.3 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type identified in 35 IAC 201.210(b).

4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE

Emission Unit	Description	Date Constructed	Emission Control Equipment
01	Natural Gas Fired Solar Turbine Inc. Turbine	1990	Water Injection for NO_x Control
02	Supplementary Duct Burner with Waste Heat Boiler	1990	None
B1	Gas Fired Boiler #1 37.8 mmBtu/hr	1970	None
B2	Gas Fired Boiler #2 87.7 mmBtu/hr	1970	None
B3	Gas Fired Boiler #3 87.7 mmBtu/hr	1970	None
B4	Gas Fired Boiler #4 87.7 mmBtu/hr	1970	None
AWCD	All Weather Chassis Dynamometer Refrigeration System	1975	ER 10 Water Chiller Condenser
70	Polyolefin Experimental Equipment	1978	CEU-70 Incinerator
101	Polyolefin Experimental Equipment	2000	CEU-70 Incinerator
177	Polyolefin Experimental Equipment	2000	CEU-70 Incinerator
222-227	6 Experimental Units (Small Scale Reactors)	2001	CEU 222-227 Thermal Oxidizer
233	Despatch Oven	1999	None
TK1	10,000 Gal Pressure Tank 10BO1	1974	Vapor Combustion Unit (VCU)
TK2	5,000 Gal Pressure Tank 05B02	1974	VCU
TK3	1,000 Gal Pressure Tank 01B03	1974	VCU
TK4	500 Gal Pressure Tank B04	1975	VCU
TK5	500 Gal Pressure Tank B05	1975	VCU
TK6	120 Gal Pressure Tank B06	1975	VCU
TK7	120 Gal Pressure Tank B07	1975	VCU
TK8	1,000 Gal Pressure Tank 01C21	1974	VCU
TK9	1,000 Gal Pressure Tank 01C22	1974	VCU
TK10	1,000 Gal Pressure Tank 01C23	1974	VCU
TK11	1,000 Gal Pressure Tank 01C24	1974	VCU

Emission Unit	Description	Date Constructed	Emission Control Equipment
TK12	1,000 Gal Pressure Tank 01C25	1974	VCU
TK13	1,000 Gal Pressure Tank 01C26	1974	VCU
TK14	1,000 Gal Pressure Tank 01C27	1974	VCU
TK15	1,000 Gal Pressure Tank 01C28	1974	VCU
TK16	1,000 Gal Pressure Tank 01C29	1974	VCU
TK17	1,000 Gal Pressure Tank 01C30	1974	VCU
TK18	1,000 Gal Pressure Tank 01C31	1974	VCU
TK19	1,000 Gal Pressure Tank 01C32	1974	VCU
TK20	1,000 Gal Pressure Tank 01C33	1974	VCU
TK21	1,000 Gal Pressure Tank 01C34	1974	VCU
TK22	1,000 Gal Pressure Tank 01D01	1974	VCU
TK23	1,000 Gal Pressure Tank 01D02	1974	VCU
TK24	1,000 Gal Pressure Tank 01D03	1974	VCU
TK25	1,000 Gal Pressure Tank 01D04	1974	VCU
TK26	1,000 Gal Pressure Tank 01D05	1974	VCU
TK27	1,000 Gal Pressure Tank 01D06	1974	VCU
TK28	1,000 Gal Pressure Tank 01D07	1974	VCU
TK29	1,000 Gal Pressure Tank 01D08	1974	VCU
TK30	2,000 Gal Pressure Tank 02C08	1974	VCU
TK31	2,000 Gal Pressure Tank 02C09	1974	VCU
TK32	2,000 Gal Pressure Tank 02C10	1974	VCU
TK33	2,000 Gal Pressure Tank 02C11	1974	VCU
TK34	2,000 Gal Pressure Tank 02C12	1974	VCU
TK35	2,000 Gal Pressure Tank 02C13	1974	VCU
TK36	2,000 Gal Pressure Tank 02C14	1974	VCU

Emission Unit	Description	Date Constructed	Emission Control Equipment
TK37	2,000 Gal Pressure Tank 02C15	1974	VCU
TK38	2,000 Gal Pressure Tank 02C16	1974	VCU
TK39	2,000 Gal Pressure Tank 02C17	1974	VCU
TK40	2,000 Gal Pressure Tank 02C18	1974	VCU
TK41	2,000 Gal Pressure Tank 02C19	1974	VCU
TK42	2,000 Gal Pressure Tank 02C20	1974	VCU
TK43	2,000 Gal Pressure Tank 02E03	1974	VCU
TK44	2,000 Gal Pressure Tank 02E04	1974	VCU
TK45	2,000 Gal Pressure Tank 02E05	1974	VCU
TK46	2,000 Gal Pressure Tank 02E06	1974	VCU
TK47	2,000 Gal Pressure Tank 02E07	1974	VCU
TK48	2,000 Gal Pressure Tank 02E08	1974	VCU
TK49	2,000 Gal Pressure Tank 02E09	1974	VCU
TK50	2,000 Gal Pressure Tank 02E10	1974	VCU
TK51	2,000 Gal Pressure Tank 02E11	1974	VCU
TK52	2,000 Gal Pressure Tank 02E21	1981	VCU
TK53	2,000 Gal Pressure Tank 02E22	1981	VCU
TK54	2,000 Gal Pressure Tank 02E23	1981	VCU
TK55	2,000 Gal Pressure Tank 02E24	1981	VCU
TK56	2,000 Gal Pressure Tank 02E25	1981	VCU
TK57	2,000 Gal Pressure Tank 02F02	1974	VCU
TK58	4,000 Gal Fixed Roof 04F07	1974	None
TK59	6,000 Gal Pressure Tank 06A11	1974	VCU
TK60	6,000 Gal Pressure Tank 06A12	1974	VCU
TK61	6,000 Gal Pressure Tank 06A13	1974	VCU

Emission Unit	Description	Date Constructed	Emission Control Equipment
TK62	6,000 Gal Pressure Tank 06A14	1974	VCU
TK63	6,000 Gal Pressure Tank 06A15	1974	VCU
TK64	6,000 Gal Pressure Tank 06A16	1974	VCU
TK65	6,000 Gal Pressure Tank 06A17	1974	VCU
TK66	6,000 Gal Pressure Tank 06C06	1974	VCU
TK67	6,000 Gal Pressure Tank 06C07	1974	VCU
TK68	6,000 Gal Pressure Tank 06C37	1982	VCU
TK69	6,000 Gal Pressure Tank 06C38	1982	VCU
TK70	6,000 Gal Pressure Tank 06C39	1982	VCU
TK71	6,000 Gal Pressure Tank 06E12	1974	VCU
TK72	6,000 Gal Pressure Tank 06E13	1974	VCU
TK73	6,000 Gal Pressure Tank 06E14	1974	VCU
TK74	6,000 Gal Pressure Tank 06E15	1974	VCU
TK75	6,000 Gal Pressure Tank 06E16	1974	VCU
TK76	6,000 Gal Pressure Tank 06E17	1974	VCU
TK77	9,500 Gal Pressure Tank 10E01	1974	VCU
TK78	9,500 Gal Pressure Tank 10E02	1974	VCU
TK79	10,000 Gal Pressure Tank 10A04	1974	VCU
TK80	10,000 Gal Pressure Tank 10A05	1974	VCU
TK81	10,000 Gal Pressure Tank 10A06	1974	VCU
TK82	10,000 Gal Pressure Tank 10A07	1974	VCU
TK83	10,000 Gal Pressure Tank 10A08	1974	VCU
TK84	10,000 Gal Pressure Tank 10A09	1974	VCU
TK85	15,000 Gal Pressure Tank 15A01	1974	VCU
TK86	15,000 Gal Pressure Tank 15A02	1974	VCU

Emission Unit	Description	Date Constructed	Emission Control Equipment
TK87	15,000 Gal Pressure Tank 15A03	1974	VCU
TK88	15,000 Gal Pressure Tank 15C01	1974	VCU
TK89	15,000 Gal Pressure Tank 15C02	1974	VCU
TK90	15,000 Gal Pressure Tank 15C03	1974	VCU
TK91	15,000 Gal Pressure Tank 15C04	1974	VCU
TK92	15,000 Gal Pressure Tank 15C05	1974	VCU
TK93	20,000 Gal Pressure Tank 20E18	1981	VCU
TK94	20,000 Gal Pressure Tank 20E19	1981	VCU
TK95	25,000 Gal Pressure Tank 25C35	1982	VCU
TK96	25,000 Gal Pressure Tank 25C36	1982	VCU
TK97	Storage Tank 10B02	2002	VCU
228	Polypropylene Bulk Feed Stock Purification System	2000	None
TC-1	Thermal Upgrading Unit	2003	In-Duct Flare System
TC-2	Thermal Upgrading Unit	2003	In-Duct Flare System
TC-3	Thermal Upgrading Unit	2003	In-Duct Flare System
TC-4	Thermal Upgrading Unit	2003	Thermal Oxidizer
TC-5	Thermal Upgrading Unit	2003	In-Duct Flare System
813	Loading Rack	1997	VCU

5.0 OVERALL SOURCE CONDITIONS

5.1 Source Description

5.1.1 This permit is issued based on the source requiring a CAAPP permit as a major source of nitrogen oxides and VOM.

5.1.2 This permit is issued based on the source not being a major source of HAPs.

5.2 Applicable Regulations

5.2.1 Specific emission units at this source are subject to particular regulations as set forth in Section 7 (Unit-Specific Conditions) of this permit.

5.2.2 In addition, emission units at this source are subject to the following regulations of general applicability:

a. No person shall cause or allow the emissions of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 25 miles per hour, pursuant to 35 IAC 212.301 and 212.314.

b. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent into the atmosphere from any emission unit, pursuant to 35 IAC 212.123(a), except as allowed by 35 IAC 212.123(b) and 212.124.

c. No person shall cause or allow the emissions of sulfur dioxide into the atmosphere from any process emission unit to exceed 2,000 ppm pursuant to 35 IAC 214.301.

5.2.3 Ozone Depleting Substances

The Permittee shall comply with the standards for recycling and emissions reduction of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

5.2.4 Fugitive Particulate Matter Operating Program

N/A

5.2.5 Risk Management Plan

Should this stationary source, as defined in 40 CFR Section 68.3, become subject to the Accidental Release Prevention regulations in 40 CFR Part 68, then the owner or operator shall submit [40 CFR 68.215(a)(2)(i) and (ii)]:

a. A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR 68.10(a); or

b. A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan (RMP), as part of the annual compliance certification required by 40 CFR Part 70 or 71.

5.2.6 a. Should this stationary source become subject to a regulation under 40 CFR Parts 60, 61, or 63, or 35 IAC after the date issued of this permit, then the owner or operator shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance with the applicable requirements of such regulation(s) as part of the annual compliance certification, as required by 40 CFR Part 70 or 71.

b. No later than upon the submittal for renewal of this permit, the owner or operator shall submit, as part of an application, the necessary information to address either the non-applicability of, or demonstrate compliance with all applicable requirements of any potentially applicable regulation which was promulgated after the date issued of this permit.

5.2.7 Episode Action Plan

a. If the source is required to have an episode action plan pursuant to 35 IAC 244.142, the Permittee shall maintain at the source and have on file with the

Illinois EPA a written episode action plan (plan) for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The plan shall contain the information specified in 35 IAC 244.144.

b. The Permittee shall immediately implement the appropriate steps described in this plan should an air pollution alert or emergency be declared.

c. If a change occurs at the source which requires a revision of the plan (e.g., operational change, change in the source contact person), a copy of the revised plan shall be submitted to the Illinois EPA for review within 30 days of the change. Such plans shall be further revised if disapproved by the Illinois EPA.

d. For sources required to have a plan pursuant to 35 IAC 244.142, a copy of the original plan and any subsequent revisions shall be sent to:

i. Illinois EPA, Compliance Section; and

ii. For sources located in Cook County and outside of the city of Chicago: Cook County Department of Environmental Control; or

iii. For sources located within the city of Chicago: Chicago Department of Environmental Control.

5.2.9 PM_{10} Contingency Measure Plan

N/A

5.2.10 CAM Plan

This stationary source has a pollutant-specific emissions unit that is subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources. The source must submit a CAM plan for each affected pollutant-specific emissions unit upon application for renewal of the initial CAAPP permit, or upon a significant modification to the CAAPP permit for the construction or modification of a large pollutant-specific emissions unit which has the potential post-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

5.3 Non-Applicability of Regulations

This permit is issued based on the source not being subject to 40 CFR Part 63, Subpart GGGG, because the source is not a major source of HAP emissions. (See also Condition 5.5.2)

5.4 Source-Wide Operational and Production Limits and Work Practices

N/A

5.5 Source-Wide Emission Limitations

5.5.1 Permitted Emissions for Fees

The annual emissions from the source, not considering insignificant activities as addressed by Section 3.0 of this permit, shall not exceed the following limitations. The overall source emissions shall be determined by adding emissions from all emission units. Compliance with these limits shall be determined on a calendar year basis. These limitations (Condition 5.5.1) are set for the purpose of establishing fees and are not federally enforceable.

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	26.16
Sulfur Dioxide (SO_2)	0.85
Particulate Matter (PM)	9.04
Nitrogen Oxides (NO_x)	280.51
HAP, not included in VOM or PM	----
Total	316.56

5.5.2 Emissions of Hazardous Air Pollutants

The emissions of HAPs from the source shall be less than 10 tons/year for each individual HAP and 25 tons/year for all HAPs combined. Compliance with these limits shall be based on a running total of 12 months of data. This condition is imposed so that the source is not a major source of HAP emissions and the requirements of 40 CFR Part 63, Subpart, GGGG, National Emission Standards for Vegetable Oil Production does not apply to the source.

5.5.3 Other Source-Wide Emission Limitations

Other source-wide emission limitations are not set for this source pursuant to the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21, state rules for Major Stationary Sources Construction and Modification, 35 IAC Part 203, or Section 502(b)(10) of the CAA. However, there may be unit specific emission limitations set forth in Section 7 of this permit pursuant to these rules.

5.6 General Recordkeeping Requirements

5.6.1 Emission Records

The Permittee shall maintain records of the following items for the source to demonstrate compliance with Condition 5.5.1, pursuant to Section 39.5(7)(b) of the Act:

Total annual emissions on a calendar year basis for the emission units covered by Section 7 (Unit Specific Conditions) of this permit, including HAP emissions.

5.6.2 Retention and Availability of Records

a. All records and logs required by this permit shall be retained for at least five years from the date of entry (unless a longer retention period is specified by the particular recordkeeping provision herein), shall be kept at a location at the source that is readily accessible to the Illinois EPA or USEPA, and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request.

b. The Permittee shall retrieve and print, on paper during normal source office hours, any records retained in an electronic format (e.g., computer) in response to an Illinois EPA or USEPA request for records during the course of a source inspection.

5.7 General Reporting Requirements

5.7.1 General Source-Wide Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of deviations of the source with the permit requirements as follows within 30 days, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

5.7.2 Annual Emissions Report

The annual emissions report required pursuant to Condition 9.7 shall contain emissions information for the previous calendar year.

5.8 General Operational Flexibility/Anticipated Operating Scenarios

N/A

5.9 General Compliance Procedures

5.9.1 General Procedures for Calculating Emissions

Compliance with the source-wide emission limits specified in Condition 5.5 shall be based on the recordkeeping and reporting requirements of Conditions 5.6 and 5.7, and compliance procedures in Section 7 (Unit Specific Conditions) of this permit.

6.0 EMISSIONS REDUCTION MARKET SYSTEM (ERMS)

6.1 Description of ERMS

The ERMS is a "cap and trade" market system for major stationary sources located in the Chicago ozone nonattainment area. It is designed to reduce VOM emissions from stationary sources to contribute to reasonable further progress toward attainment, as required by Section 182(c) of the CAA.

The ERMS addresses VOM emissions during a seasonal allotment period from May 1 through September 30. Participating sources must hold "allotment trading units" (ATUs) for their actual seasonal VOM emissions. Each year participating sources are issued ATUs based on allotments set in the sources' CAAPP permits. These allotments are established from historical VOM emissions or "baseline emissions" lowered to provide the emissions reductions from stationary sources required for reasonable further progress.

By December 31 of each year, the end of the reconciliation period following the seasonal allotment period, each source should have sufficient ATUs in its transaction account to cover its actual VOM emissions during the preceding season. A transaction account's balance as of December 31 will include any valid ATU transfer agreements entered into as of December 31 of the given year, provided such agreements are promptly submitted to the Illinois EPA for entry into the transaction account database. The Illinois EPA will then retire ATUs in sources' transaction accounts in amounts equivalent to their seasonal emissions. When a source does not appear to have sufficient ATUs in its transaction account, the Illinois EPA will issue a notice to the source to begin the process for Emissions Excursion Compensation.

In addition to receiving ATUs pursuant to their allotments, participating sources may also obtain ATUs from the market, including ATUs bought from other participating sources and general participants in the ERMS that hold ATUs (35 IAC 205.630) and ATUs issued by the Illinois EPA as a consequence of VOM emissions reductions from an Emissions Reduction Generator or an Intersector Transaction (35 IAC 205.500 and 35 IAC 205.510). During the reconciliation period, sources may also buy ATUs from a secondary reserve of ATUs managed by the Illinois EPA, the "Alternative Compliance Market Account" (ACMA) (35 IAC 205.710). Sources may also transfer or sell the ATUs that they hold to other sources or participants (35 IAC 205.630).

6.2 Applicability

This permit is issued based on this source not being a participating source in the Emissions Reduction Market System (ERMS), 35 IAC Part 205, pursuant to 35 IAC 205.200. This is based on the source's actual VOM emissions during the seasonal allotment period from May 1 through September 30 of each year being less than 10 tons and the source's baseline emissions also being less than 10 tons.

6.3 Recordkeeping and Reporting

a. The Permittee shall maintain the following records to allow the confirmation of actual VOM emissions during the seasonal allotment period:

i. Records of operating data and other information for each individual emission unit or group of related emission units at the source, as specified in Sections 5 and 7 of this permit, as appropriate, to determine actual VOM emissions during the seasonal allotment period;

ii. Records of the VOM emissions, in tons, during the seasonal allotment period, with supporting calculations, for each individual emission unit or group of related emission units at the source, determined in accordance with the procedures specified in Sections 5 and 7 of this permit; and

iii. Total VOM emissions from the source, in tons, during each seasonal allotment period, which shall be compiled by November 30 of each year.

b. In the event that the source's VOM emissions during the seasonal allotment period equal or exceed 10 tons, the source shall become a participating source in the ERMS and beginning with the following seasonal allotment period, shall comply with 35 IAC Part 205, by holding allotment trading units (ATUs) for its VOM emissions during each seasonal allotment period, unless the source obtains exemption from the ERMS by operating with seasonal VOM emissions of no more than 15 tons pursuant to a limitation applied for and established in its CAAPP permit.

7.0 UNIT SPECIFIC CONDITIONS

7.1 Units 01 and 02 Natural Gas Fired Turbine and Supplementary Duct Burner.

7.1.1 Description

These units form a cogeneration system that provides electricity and steam for the research and development facility. The heat input capacity of the turbine is 93.5 million Btu per hour and the capacity of the duct burner is 34 million Btu per hour.

7.1.2 List of Emission Equipment and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
01	Natural Gas Fired Solar Turbine, Inc. Turbine	Water Injection for NO_x Control
02	Supplementary Duct Burner with Waste Heat Boiler	None

7.1.3 Applicable Regulations

a. The "affected emission units" for the purpose of these unit-specific conditions, are listed in Condition7.1.2.

b. The affected emission units are subject to the emission limits identified in Condition 5.2.2.

c. i. The gas turbine and duct burner are subject to a New Source Performance Standards (NSPS) for Stationary Gas Turbines and small steam generating units, respectively, 40 CFR 60 Subparts A, GG and Dc. The Illinois EPA is administering NSPS in Illinois on behalf of USEPA under a delegation agreement.

ii. At all times, the Permittee shall, to the extent practicable, maintain and operate the turbine, duct burner, and associated control system in a manner consistent with good air pollution control practice for minimizing emissions.

d. No owner or operator shall allow any gases from the gas fired turbine to be discharged into the atmosphere which contain nitrogen oxides in excess of the following [40 CFR 60.322(a)(2)]:

$$STD = 0.0150 \frac{(14.4)}{Y} + F$$

Where:

STD = Allowable NO_x emissions (percent by volume at 15 percent oxygen and on a dry basis).

Y = Manufacturer's rated heat rate at manufacturer's rated peak load (kilojoules per watt hour), or actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour.

F = NO_x emission allowance for fuel-bound nitrogen as defined below.

F shall be defined according to the nitrogen content of the fuel as follows:

Fuel-Bound Nitrogen (Percent by Weight)	F (NO_x Percent by Volume)
$N \leq 0.015$	0
$0.015 < N \leq 0.1$	0.04(N)
$0.1 < N \leq 0.25$	0.004+0.0067(N-0.1)
$N > 0.25$	0.005

Where:

N = The nitrogen content of the fuel (percent by weight).

e. No owner or operate shall burn any fuel in the turbine which contains sulfur in excess of 0.8 percent by weight [40 CFR 60.333(b)].

f. No person shall cause or allow the emission of carbon monoxide (CO) into the atmosphere from the duct burner to exceed 200 ppm, corrected to 50 percent excess air [35 IAC 216.121].

7.1.4 Non-Applicable Regulations

a. The emission standards of 40 CFR 60 Subpart Dc are not applicable for the duct burner due to their being no standards for steam generating units that combust natural gas.

b. The duct burner is not subject to 35 IAC 217.121, emission of nitrogen oxides from new fuel combustion sources, because the actual heat input is less than 73.2 MW (250 mmBtu/hr).

7.1.5 Operational Limitations and Work Practices

a. i. Emissions of nitrogen oxides (NO_x) from the gas turbine shall be controlled by water injection techniques, using at least 0.8 pound water per pound of fuel, except when ice fog is deemed a traffic hazard by the Permittee.

ii. Emissions of NO_x, attributable to the turbine, shall not exceed 49 ppm, adjusted to 15% oxygen in the exhaust gas, at ISO standard day conditions, except when ice fog is deemed a traffic hazard by the Permittee.

iii. These limitations shall not apply to the extent that noncompliance is a result of a malfunction of the system for production of injection water, provided that good air pollution control practice to minimize NO_x emissions is followed. For this purpose the definition of "malfunction" at 40 CFR 60.2 shall apply.

b. Emissions of NO_x attributable to the duct burner shall not exceed 0.1 lb/million Btu heat input to the duct burner.

Condition 7.1.5(a) and (b) represents the application of the Best Available Control Technology for NO_x as required by Section 165 of the Clean Air Act. These conditions originate from construction permit 89030015.

c. Natural gas shall be the only fuel fired in the turbine.

d. Natural gas, and a negligible fuel gas stream from CEU-70, 101 and 177, shall be the only fuel fired in the duct burner. For demonstrating compliance with emission limits, this fuel gas may be assumed to be natural gas.

7.1.6 Emission Limitations

a. The emissions of carbon monoxide (CO) from the cogeneration system, i.e., the turbine and duct burner combined, shall not exceed 77 ppm, 20 pounds/hour and 95 tons year.

b. The emissions of nitrogen oxide from the cogeneration system shall not exceed 49 ppm at ISO standard day conditions or 20 pounds/hour, and 92 tons/year.

The emission limitations of Condition 7.1.6 originate from PSD Construction Permit 89030015 [T1].

7.1.7 Testing Requirements

Upon request from the Illinois EPA, the nitrogen oxides (NO_x) emissions of the cogeneration system shall be measured by an approved testing service. Measurements shall be made in accordance with 40 CFR 60, Appendix A, Method 20. The Illinois EPA shall be notified 30 days in advance of testing to allow it to witness the tests. Test results shall be promptly compiled and reported to the Illinois EPA within 120 days of the test date.

The steam or water to fuel ratio or other parameters that are continuously monitored as described in Condition 7.1.8 shall be monitored during the performance test to establish acceptable values and ranges.

7.1.8 Monitoring Requirements

The Permittee shall maintain, calibrate and operate continuous monitoring system to monitor and record the fuel consumption and the ratio of water to fuel being fired in the turbine, as approved by the Illinois EPA. These systems shall be accurate to within 5.0 percent [40 CFR 60.334(a)].

7.1.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items for the affected emission units:

a. Records on the operation of the monitoring system that include the fuel consumption and the ratio of water to fuel being fired in the turbine [40 CFR 60.334(a)].

b. The owner or operator shall record and maintain records of the daily amounts of each fuel combusted in the cogeneration system [40 CFR 60.48(c)(g)].

c. Records of operation, as related to traffic hazard due to ice fog.

d. The owner or operator shall maintain a file of all measurements, including continuous monitoring system, monitoring device and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; and adjustments and maintenance performed on these systems or devices [40 CFR 60.7(f)].

e. The owner or operator shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction of the cogeneration system; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative [40 CFR 60.7(b)].

f. Records of monthly and aggregate annual emissions of CO, NO_x, PM, VOM and SO_2.

7.1.10 Reporting Requirements

The Permittee shall notify the Illinois EPA as follows:

a. For the purpose of reports required under 40 CFR 60.7(c), periods of excess emissions that shall be reported are defined as follows:

   Any one-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined to demonstrate compliance with Condition 7.1.3(b) by the performance test required in 40 CFR 60.8. Any unit operating hour in which no water or steam is injected into the turbine shall also be considered an excess emission. Any period during which the fuel-bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the performance test required in 40 CFR 60.8. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions (temperature, pressure, humidity), gas turbine load, and nitrogen content of the fuel during the period of excess emissions [40 CFR 60.334(c)]. This report shall be submitted semiannually.

b. When an ice fog exemption has occurred as provided in 40 CFR 60.332(g), these exemptions shall be reported in writing to the Administrator quarterly. For each period the ambient conditions existing during the period, the date and time the air pollution control system was deactivated, and the date and time the air pollution control system was reactivated shall be reported. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter.

c. A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a NSPS standard applies, unless that change is specifically exempted under an applicable NSPS Subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Illinois EPA may request additional relevant information subsequent to this notice [40 CFR 60.7(a)(4)].

d. The Permittee shall notify the Agency in writing if the cogeneration system is removed from service for a major turbine overhaul or is permanently shutdown.

7.1.11 Operational Flexibility

N/A

7.1.12 Compliance Procedures

To determine compliance with emission limits, emissions may be based on the emission factors listed below:

Pollutant	Factors for Turbine (lb/mmBtu)	Natural Gas Emission Factors for Duct Burner
NO_x	0.151	a
CO	0.082	84 $lb/10^6/ft^3$
VOM	0.0021	5.5 $lb/10^6/ft^3$
PM	0.0066	7.6 $lb/10^6/ft^3$
SO_2	0.0032	0.6 $lb/10^6/ft^3$

a A stack test was performed and total combined emissions were tested at 0.151 lb/mmBtu for the turbine and duct burner.

The turbine emission factors are from Tables 3.1-1 and 3.1-2, AP-42 Emission Factors from Stationary Gas Turbines.

The duct burner emission factors are from uncontrolled natural gas combustion in boilers, Tables 1.4-1 and 1.4-2, AP-42, Volume I, Supplement F, March, 1998.

7.2 Units B1-B4 Natural Gas Fired Boilers

7.2.1 Description

Steam is produced by the boilers for heating the buildings. The heat input capacity for Boiler 1 is 37.8 million Btu/hr and the other boilers are each 87.7 million Btu/hr and have economizers.

7.2.2 List of Emission Equipment and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
B1-B4	4 Gas Fired Boilers	None

7.2.3 Applicable Regulations

a. The "affected boilers" for the purpose of these unit-specific conditions, are listed in Condition 7.2.2.

b. The affected boilers are subject to the emission limits identified in Condition 5.2.2.

c. No person shall cause or allow the emission of carbon monoxide into the atmosphere from Boilers B1-B4 to exceed 200 ppm, corrected to 50 percent excess air [35 Ill. Adm. Code 216.121].

7.2.4 Non-Applicability of Regulations

a. The fuel combustion nitrogen oxides emission limitations of 35 IAC 217.121 and 217.141 do not apply because the capacity of the boilers are smaller than the applicability level of the regulations.

b. 40 CFR Subpart Dc Standards of Performance for Small Steam Generating Units does not apply because the 4 boilers began operating in February of 1975 which is before the applicability date of Subpart Dc.

7.2.5 Operational and Work Practices

Natural gas, and a negligible fuel gas stream from CEU-70, CEU-101 and CEU-177, shall be the only fuel used in Boilers B1-B4. For demonstrating compliance with emission limits, the fuel gas stream may be assumed to be natural gas.

7.2.6 Emission Limitations

There are no specific emission limitations for the affected boilers; however, there are source wide limitations in Condition 5.5 that include this unit.

7.2.7 Testing Requirements

N/A

7.2.8 Monitoring Requirements

N/A

7.2.9 Recordkeeping Requirements

The owner or operator shall collect and record the following for Boilers B1-B4.

a. Annual natural gas usage in cubic feet.

b. Annual emissions.

7.2.10 Reporting Requirements

Report of Deviations

If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records and a description of the exceedance or violation and efforts to reduce emissions and future occurrences [Section 39.5(7)(f)(ii) of the Act].

7.2.11 Operational Flexibility

N/A

7.2.12 Compliance Procedures

Compliance with the emission limits for Boilers B1-B4 shall be based on the records required by Condition 7.2.9 and the use of USEPA emissions estimating guidance, i.e., Tables 1.4-1 and 1.4-2, Volume I, Supplement F, March, 1998.

Pollutant	Natural Gas Emission Factor (Lb/10^6 ft^3)
NO_x	100
SO_2	0.6
VOM	5.5
PM	7.6

7.3 Experimental Research Equipment

7.3.1 Description

The primary purpose of the AWCD is to simulate different temperatures. The AWCD is equipped with a refrigeration system so that motor vehicles can be tested within a broad range of ambient temperatures.

The other emission units are experimental research equipment.

7.3.2 List of Emission Equipment and Pollution Control Equipment

Emission Units	Description	Emission Control Equipment
AWCD	All Weather Chassis Dynamometer Refrigeration System	ER 10 Water Chiller Condenser
70	CEU70 Polyolefin Experimental Equipment Collection System	CEU-70 Incinerator
101	CEU-101 Polyolefin Experimental Equipment	CEU-70 Incinerator
177	CEU-177 Polyolefin Experimental Equipment	CEU-70 Incinerator
233	Despatch Oven	None
222-227	CEU 222-227 6 Experimental Units (Small Scale Reactors)	CEU 222-227 Thermal Oxidizer
228	Polypropylene Bulk Feed Stock Purification System	None
TC-1, 2, 3 and 5	4 Thermal Upgrading Units	In-Duct Flare System
TC-4	Thermal Upgrading Unit	Thermal Oxidizer

7.3.3 Applicable Regulations

a. An affected emission unit with regard to the permit conditions of Section 7.3 is any emission unit listed in Condition 7.3.2.

b. Each affected emission unit is subject to the emission limits identified in Condition 5.2.2.

c. The owner or operator shall not cause or allow the discharge of more than 3.6 Kg/hr (8 lbs/hr) of organic material into the atmosphere from any affected unit [35 IAC 218.301]. If no odor nuisance exists this limitation shall apply only to photochemically reactive material.

d. No person shall cause or allow the discharge of more than 32.8 ml (2 cubic inches) of VOL with vapor pressure of 17.24 KPa (2.5 psia) or greater at 294.3°K (70°F) into the atmosphere from any pump or compressor in any 15 minute period at standard conditions [35 IAC 218.142].

7.3.4 Non-Applicability of Regulations

a. The control requirements of 35 IAC 218 Subpart RR Miscellaneous Organic Chemical Manufacturing Processes and Subpart TT Other Emission Units do not apply because potential VOM emissions from applicable emission units [as defined in 35 IAC 218.980(b)] are limited to below 25 tons per year which is below the applicability levels of the Subparts.

b. The control requirements of 40 CFR Part 60 Subpart VV VOC SOCMI Leaks do not apply to the affected units because the capacities are below the applicability level.

c. The control requirements of 40 CFR Part 60 Subpart DDD VOC Emissions from Polymer Manufacturing Industry do not apply to the affected units because 40 CFR 60.560(f) exempts experimental and research emission units.

7.3.5 Operational and Work Practices

a. Natural gas and the effluent from the thermal upgrading units shall be the only fuel burned in the thermal oxidizer and in-duct flare systems.

b. The total capacity of the fuel burners in the thermal oxidizer and afterburner shall not exceed 1.6 million Btu/hour.

c. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate the upgrading units and associated in-duct flare system and the thermal oxidizer system in a manner consistent with good air pollution control practice for minimizing emissions. At minimum these practices include the following:

i. The thermal oxidizer’s combustion chamber shall be preheated to at least the recommended temperature prior to venting of emissions to the unit that is consistent with the temperature at which compliance was demonstrated in the most recent compliance test.

ii. The thermal oxidizer's combustion chamber temperature shall be maintained at temperature at which the compliance was demonstrated during the venting of the emissions to the unit.

iii. Operation in accordance with written procedures for the operation maintenance, and monitoring of the thermal oxidizer's system.

d. The thermal upgrading unit's oxidizer system shall be equipped with a continuous monitoring device for combustion chamber temperature, which shall be installed, calibrated, and maintained according to vendor's specifications and operated at all times that the thermal oxidizer is in use.

e. The Permittee shall maintain and operate the control systems in accordance with good air pollution practice to minimize volatile organic material emissions, including performance of routine inspections, periodic maintenance, and timely repair to maintain effective control.

7.3.6 Emission Limitations

a. Emissions of VOM from this source, excluding VOM emissions exempted by 35 IAC 218 Subparts RR and TT shall not exceed 24.5 tons per year. This limitation is established to exempt this source from the control requirements of 35 IAC 218 Subparts RR and TT, pursuant to 35 IAC 218.980(b). For this particular source, VOM emissions exempted by 35 IAC 218 Subparts RR and TT include fuel combustion units, units regulated by 35 IAC 218 Subpart Y (Gasoline Distribution) and storage tanks. Therefore, emissions from fuel combustion units, units regulated by 35 IAC 218 Subpart Y, storage tanks and other units exempted by 35 IAC 218 Subparts RR and TT do not count toward the 24.5 ton limit.

The above limitations were established in Permit 98090047, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21 [T1].

b. Emissions of VOM from the despatch oven shall not exceed 2.2 tons/year. Compliance with this limit shall be determined from a running total of 12 months of data. This limitation is based on information in the application and is established to assure that this oven does not constitute a major modification pursuant to 35 IAC Part 203.

The above limitations were established in Permit 99060072, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21 [T1].

c. This permit is issued based on negligible emissions from units CEU222-227 (6 experimental units). For this purpose, total emissions shall not exceed the following:

Volatile Organic Material	0.44 Tons/Year
Particulate Matter	0.44 Tons/Year
Nitrogen Oxides	6.6 Tons/Year
Carbon Monoxide	4.4 Tons/Year

The above limitations were established in Permit 99060089, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21 [T1].

d. This permit is issued based on negligible emissions of volatile organic material from the polyolefin experimental equipment CEU-101 and CEU-177. For this purpose total emissions from these operations shall not exceed the following:

Volatile Organic Material Emissions: 0.55 ton/year.

The above limitations were established in permit 00070002, pursuant to 35 IAC Part 203. These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to 35 IA Part 203 [T1].

e. i. Emissions of volatile organic material (VOM) from each thermal upgrading unit shall not exceed 0.4 lb/hr and 0.4 tons/year.

ii. This permit is based on negligible emissions of other regulated air pollutants from the thermal upgrading units. For this purpose, emissions of each regulated pollutant shall not exceed 0.1 lb/hr and 0.44 tons/year from each thermal upgrading unit.

The above limitations were established in permit 03070062, pursuant to 35 IAC Part 203. These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to 35 IA Part 203 [T1].

f. This permit is issued based on negligible emissions from the polypropylene bulk feed stock purification system. For this purpose, total emissions from the system shall not exceed the following:

Volatile Organic Material Emissions: 0.44 ton/year.

The above limitations were established in permit 00080035, pursuant to 35 IAC Part 203. These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to 35 IA Part 203 [T1].

7.3.7 Testing Requirements

When in the opinion of the Illinois EPA it is necessary to conduct testing to demonstrate compliance with emission limits, the owner or operator shall conduct such tests in accordance with the applicable test methods and procedures specified in 35 IAC 218.105.

7.3.8 Monitoring Requirements

N/A

7.3.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items:

a. An analysis demonstrating the design capacity for emission units 70, 101, 177, and 204 for use in determining exemptions from 40 CFR 60 Subpart VV [40 CFR 60,486(i)].

b. Monthly VOM usage for affected units in pounds.

c. Monthly VOM emissions for affected units in pounds.

d. Operating hours for emission unit 70.

e. A maintenance log for the oxidizer and monitoring equipment, controlling Unit TC-4, detailing all routine and non-routine maintenance performed, including dates and duration of any outages.

f. On at least an annual basis, e.g., in conjunction with data collection, for the source's SARA 313 report, the Permittee shall compile relevant data from operating records for these units to evaluate the extent of which control systems are utilized, to estimate their emissions of volatile organic material, and to generally confirm compliance with Conditions 1 and 2.

g. The Permittee shall maintain a record of any changes to the features of the existing system that increase its heat input capacity.

7.3.10 Reporting Requirements

Report of Deviations

If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records and a description of the exceedance or violation and efforts to reduce emissions and future occurrences [Section 39.5(7)(f)(ii) of the Act].

7.3.11 Operational Flexibility

N/A

7.3.12 Compliance Procedures

Calculation of emission may be determined using the following emission estimating guidance:

For Emission Units: AWCD, 233 and 222-227

VOM Emissions = VOM Usage

For Emission Unit 70:

VOM Emissions = Operation Hours x 1.13 pounds/hour

7.4 96 Storage Tanks

7.4.1 Description

These tanks are used for storing and blending of test fuels for research and development purposes. The test fuels consist of various gasolines, diesel fuels, naphtha, jet fuel, heater oils, kerosene, blending components and fuel additives. All tanks except one (Tank 04F07) are kept under pressure. At the loading rack, trucks are loaded or off-loaded into the storage tanks with the test fuels.

7.4.2 List of Emission Equipment

Emission Units	Description	Emission Control Equipment
TK1 – TK57 and TK59 – TK97	95 Pressure Tanks	Vapor Combustion Unit
TK58	4,000 Gal Fixed Roof Tank 04F07	None
813	Loading Rack	Vapor Combustion Unit

7.4.3 Applicable Regulations

a. The "affected emission units" for the purpose of these unit-specific conditions, are listed in Condition 7.4.2.

b. The affected emission units are subject to the emission limits identified in Condition 5.2.2.

c. No person shall cause or allow the discharge of more than 3.6 Kg/hr (8 lbs/hr) of organic material into atmosphere during the loading of any organic material from the aggregate loading pipes of any loading area having throughput of greater than 151 cubic meters per day (40,000 gallons per day) into any railroad tank car, tank truck or trailer unless such loading area is equipped with submerged loading pipes [35 IAC 218.122(a)].

d. No person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 946 liters (250 gallons), unless such tank is equipped with a permanent submerged loading pipe [35 IAC 218.122(b)].

e. No person shall cause or allow the discharge of more than 3.6 Kg/hr (8 lbs/hr) of organic material into the atmosphere from any storage and blending tank. If no odor nuisance exists the limitation of this regulation shall apply only to photochemically reactive material [35 IAC 218.301].

f. No person may cause or allow the transfer of gasoline from a delivery vessel into a stationary storage tank of 575 gallons or greater unless [35 IAC 218.581(a)]:

i. The delivery vessel and the stationary storage tank are each equipped with a vapor collection system;

ii. Each vapor collection system is operating;

iii. The delivery vessel displays the appropriate sticker pursuant to the requirements of 35 IAC 218.584(b) or (d) of this Part;

iv. The pressure relief valve(s) on the stationary storage tank and the delivery vessel are set to release at no less than 0.7 psi or the highest pressure allowed by state or local fire codes or the guidelines of the National Fire Prevention Association; and

v. The stationary storage tank is equipped with a submerged loading pipe.

g. The Permittee shall [35 IAC 218.581(d)]:

i. Maintain and operate each vapor control system in accordance with the owner's instructions;

ii. Promptly notify the owner of any scheduled maintenance or malfunction requiring replacement or repair of a major component of a vapor control system;

iii. Maintain gauges, meters or other specified testing devices in proper working order; and

iv. Operate the bulk plant vapor collection system and gasoline loading equipment in a manner that prevents:

A. Gauge pressure from exceeding 45.7 cm (18 in.) of water and vacuum from exceeding 15.2 cm (6 in.) of water, as measured as close as possible to the vapor hose connection [35 IAC 218.581(d)(4)(A)]; and

B. A reading equal to or greater than 100 percent of the lower explosive limit (LEL measured as propane) when tested in accordance with the procedure described in

"Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems", Appendix B, EPA 450/2-78-051 [35 IAC 218.581(d)(4)(B)]; and

C. Avoidable leaks of liquid during loading or unloading operations.

7.4.4 Non-Applicable Regulations

The standards of 40 CFR Subpart Kb Volatile Organic Liquid Storage Vessels are not applicable because all tanks listed in Condition 7.4.2 with a capacity greater than 40 cubic meters (10,567 gallons) were constructed or modified prior to 1984.

7.4.5 Operational Limitations and Work Practices

All tanks listed in Condition 7.4.2, except Tank 04F07 shall be kept under pressure so as to prevent VOM emissions from occurring during storage and blending.

7.4.6 Emission Limitations

Emissions and operation of equipment associated with loading, blending and storage of organic materials at this facility shall not exceed the following:

Gasoline and Organic Material Throughput		VOM Emissions	
(Gal/Mo)	(Gal/Yr)	(Lb/Mo)	(Ton/Yr)
470,000	5,640,000	840	5.0

These limits are based on maximum operation, control efficiency of vapor combustion unit, and engineering judgment. Compliance with annual limits shall be determined from a running total of 12 months of data. The organic material throughput limit is only for organic material with a vapor pressure greater than 0.1 psi at 70°F.

The above limitations were established in Permit 97060008, pursuant to 35 IAC Part 203. These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically 35 IAC Part 203 [T1].

7.4.7 Testing Requirements

Within 15 business days after discovery of any leak by the owner, the operator, the Illinois EPA or the USEPA, the Permittee shall repair and retest a vapor collection system which exceeds the limits of 35 IAC 218.581 [Condition 7.4.3(g)(iv)] pursuant to 35 IAC 218.581(d)(6).

7.4.8 Monitoring Requirements

The owner or operator shall provide a pressure tap or equivalent on the bulk plant vapor collection system in order to allow the determination of compliance with 35 IAC 218.581(d)(4)(A) [35 IAC 218.581(d)(5)].

7.4.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items:

a. The Permittee shall maintain records of the monthly and annual throughput of gasoline and organic material.

b. The vapor pressures of each material stored in the tanks.

c. Monthly and annual VOM emissions.

7.4.10 Reporting Requirements

Report of Deviations

If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records and a description of the exceedance or violation and efforts to reduce emissions and future occurrences [Section 39.5(7)(f)(ii) of the Act].

7.4.11 Operational Flexibility

N/A

7.4.12 Compliance Procedures

a. VOM emissions for the loading, blending and storage of organic materials for the pressure tanks may be calculated using the following emission factor:

Emission Factor = 0.00029 lb VOM/gallon Throughput

VOM Emissions = Throughput x Emission Factor

The emission factor was provided by the source.

b. Compliance with the emission limits for the fixed roof storage tank (04F07) shall be based on USEPA approved emissions estimating guidance. For the purpose of estimating VOM emissions from the storage tanks, the Tanks Program is acceptable.

8.0 GENERAL PERMIT CONDITIONS

8.1 Permit Shield

Pursuant to Section 39.5(7)(j) of the Act, the Permittee has requested and has been granted a permit shield. This permit shield provides that compliance with the conditions of this permit shall be deemed compliance with applicable requirements which were applicable as of the date the proposed permit for this source was issued, provided that either the applicable requirements are specifically identified within this permit, or the Illinois EPA, in acting on this permit application, has determined that other requirements specifically identified are not applicable to this source and this determination (or a concise summary thereof) is included in this permit.

This permit shield does not extend to applicable requirements which are promulgated after October 5, 2002 (the date of issuance of the draft permit) unless this permit has been modified to reflect such new requirements.

8.2 Applicability of Title IV Requirements (Acid Deposition Control)

This source is not an affected source under Title IV of the CAA and is not subject to requirements pursuant to Title IV of the CAA.

8.3 Emissions Trading Programs

No permit revision shall be required for increases in emissions allowed under any USEPA approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for elsewhere in this permit and that are authorized by the applicable requirement [Section 39.5(7)(o)(vii) of the Act].

8.4 Operational Flexibility/Anticipated Operating Scenarios

8.4.1 Changes Specifically Addressed by Permit

Physical or operational changes specifically addressed by the Conditions of this permit that have been identified as not requiring Illinois EPA notification may be implemented without prior notice to the Illinois EPA.

8.4.2 Changes Requiring Prior Notification

The Permittee is authorized to make physical or operational changes that contravene express permit terms without applying for or obtaining an amendment to this permit, provided that [Section 39.5(12)(a)(i) of the Act]:

a. The changes do not violate applicable requirements;

b. The changes do not contravene federally enforceable permit terms or conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements;

c. The changes do not constitute a modification under Title I of the CAA;

d. Emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change; and

e. The Permittee provides written notice to the Illinois EPA, Division of Air Pollution Control, Permit Section, at least 7 days before commencement of the change. This notice shall:

i. Describe the physical or operational change;

ii. Identify the schedule for implementing the physical or operational change;

iii. Provide a statement of whether or not any New Source Performance Standard (NSPS) is applicable to the physical or operational change and the reason why the NSPS does or does not apply;

iv. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and

v. Provide a certification that the physical or operational change will not result in emissions greater than authorized under the Conditions of this permit.

8.5 Testing Procedures

Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods. Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of any tests conducted as required by this permit or as the result of a request by the Illinois EPA shall be submitted as specified in Condition 8.6.

8.6 Reporting Requirements

8.6.1 Monitoring Reports

If monitoring is required by any applicable requirements or conditions of this permit, a report summarizing the required monitoring results, as specified in the conditions of this permit, shall be submitted to the Air Compliance Section of the Illinois EPA every six months as follows [Section 39.5(7)(f) of the Act]:

Monitoring Period	Report Due Date
January - June	September 1
July - December	March 1

All instances of deviations from permit requirements must be clearly identified in such reports. All such reports shall be certified in accordance with Condition 9.9.

8.6.2 Test Notifications

Unless otherwise specified elsewhere in this permit, a written test plan for any test required by this permit shall be submitted to the Illinois EPA for review at least 60 days prior to the testing pursuant to Section 39.5(7)(a) of the Act. The notification shall include at a minimum:

a. The name and identification of the affected unit(s);

b. The person(s) who will be performing sampling and analysis and their experience with similar tests;

c. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the source and any control equipment will be determined;

d. The specific determination of emissions and operation which are intended to be made, including sampling and monitoring locations;

e. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods;

f. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification; and

g. Any proposed use of an alternative test method, with detailed justification.

8.6.3 Test Reports

Unless otherwise specified elsewhere in this permit, the results of any test required by this permit shall be submitted to the Illinois EPA within 60 days of completion of the testing. The test report shall include at a minimum [Section 39.5(7)(e)(i) of the Act]:

a. The name and identification of the affected unit(s);

b. The date and time of the sampling or measurements;

c. The date any analyses were performed;

d. The name of the company that performed the tests and/or analyses;

e. The test and analytical methodologies used;

f. The results of the tests including raw data, and/or analyses including sample calculations;

g. The operating conditions at the time of the sampling or measurements; and

h. The name of any relevant observers present including the testing company's representatives, any Illinois EPA or USEPA representatives, and the representatives of the source.

8.6.4 Reporting Addresses

a. The following addresses should be utilized for the submittal of reports, notifications, and renewals:

i. Illinois EPA - Air Compliance Section

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (MC 40)
P.O. Box 19276
Springfield, Illinois 62794-9276

ii. Illinois EPA - Air Regional Field Office

Illinois Environmental Protection Agency
Division of Air Pollution Control
9511 West Harrison
Des Plaines, Illinois 60016

iii. Illinois EPA - Air Permit Section

Illinois Environmental Protection Agency
Division of Air Pollution Control
Permit Section (MC 11)
P.O. Box 19506
Springfield, Illinois 62794-9506

iv. USEPA Region 5 - Air Branch

USEPA (AE - 17J)
Air & Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604

b. Unless otherwise specified in the particular provision of this permit, reports shall be sent to the Illinois EPA - Air Compliance Section with a copy sent to the Illinois EPA - Air Regional Field Office.

8.7 Obligation to Comply with Title I Requirements

Any term, condition, or requirement identified in this permit by T1, T1R, or T1N is established or revised pursuant to 35 IAC Part 203 or 40 CFR 52.21 ("Title I provisions") and incorporated into this permit pursuant to both Section 39.5 and Title I provisions. Notwithstanding the expiration date on the first page of this permit, the Title I conditions remain in effect pursuant to Title I provisions until the Illinois EPA deletes or revises them in accordance with Title I procedures.

9.0 STANDARD PERMIT CONDITIONS

9.1 Effect of Permit

9.1.1 The issuance of this permit does not release the Permittee from compliance with State and Federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the United States or the State of Illinois or applicable ordinances, except as specifically stated in this permit and as allowed by law and rule [Section 39.5(7)(j)(iv) of the Act].

9.1.2 In particular, this permit does not alter or affect the following:

a. The provisions of Section 303 (emergency powers) of the CAA, including USEPA's authority under that Section;

b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;

c. The applicable requirements of the acid rain program consistent with Section 408(a) of the CAA; and

d. The ability of USEPA to obtain information from a source pursuant to Section 114 (inspections, monitoring, and entry) of the CAA.

9.1.3 Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

9.2 General Obligations of Permittee

9.2.1 Duty to Comply

The Permittee must comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the CAA and the Act, and is grounds for any or all of the following: enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application [Section 39.5(7)(o)(i) of the Act].

The Permittee shall meet applicable requirements that become effective during the permit term in a timely manner unless an alternate schedule for compliance with the applicable requirement is established.

9.2.2 Duty to Maintain Equipment

The Permittee shall maintain all equipment covered under this permit in such a manner that the performance or operation of such equipment shall not cause a violation of applicable requirements.

9.2.3 Duty to Cease Operation

No person shall cause, threaten or allow the continued operation of any emission unit during malfunction or breakdown of the emission unit or related air pollution control equipment if such operation would cause a violation of an applicable emission standard, regulatory requirement, ambient air quality standard or permit limitation unless such malfunction or breakdown is allowed by a permit condition [Section 39.5(6)(c) of the Act].

9.2.4 Disposal Operations

The source shall be operated in such a manner that the disposal of air contaminants collected by the equipment operations, or activities shall not cause a violation of the Act or regulations promulgated thereunder.

9.2.5 Duty to Pay Fees

The Permittee must pay fees to the Illinois EPA consistent with the fee schedule approved pursuant to Section 39.5(18) of the Act, and submit any information relevant thereto [Section 39.5(7)(o)(vi) of the Act]. The check should be payable to "Treasurer, State of Illinois" and sent to: Fiscal Services Section, Illinois Environmental Protection Agency, P.O. Box 19276, Springfield, Illinois 62794-9276.

9.3 Obligation to Allow Illinois EPA Surveillance

Upon presentation of proper credentials and other documents, the Permittee shall allow the Illinois EPA, or an authorized representative to perform the following [Section 39.5(7)(a) and (p)(ii) of the Act and 415 ILCS 5/4]:

a. Enter upon the Permittee's premises where an actual or potential emission unit is located; where any regulated equipment, operation, or activity is located or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect during hours of operation any sources, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

d. Sample or monitor any substances or parameters at any location:

i. At reasonable times, for the purposes of assuring permit compliance; or

ii. As otherwise authorized by the CAA, or the Act.

e. Obtain and remove samples of any discharge or emission of pollutants authorized by this permit; and

f. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any activity, discharge or emission at the source authorized by this permit.

9.4 Obligation to Comply with Other Requirements

The issuance of this permit does not release the Permittee from applicable State and Federal laws and regulations, and applicable local ordinances addressing subjects other than air pollution control.

9.5 Liability

9.5.1 Title

This permit shall not be considered as in any manner affecting the title of the premises upon which the permitted source is located.

9.5.2 Liability of Permittee

This permit does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the sources.

9.5.3 Structural Stability

This permit does not take into consideration or attest to the structural stability of any unit or part of the source.

9.5.4 Illinois EPA Liability

This permit in no manner implies or suggests that the Illinois EPA (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the source.

9.5.5 Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege [Section 39.5(7)(o)(iv) of the Act].

9.6 Recordkeeping

9.6.1 Control Equipment Maintenance Records

A maintenance record shall be kept on the premises for each item of air pollution control equipment. As a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

9.6.2 Records of Changes in Operation

A record shall be kept describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes [Section 39.5(12)(b)(iv) of the Act].

9.6.3 Retention of Records

a. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit [Section 39.5(7)(e)(ii) of the Act].

b. Other records required by this permit shall be retained for a period of at least 5 years from the date of entry unless a longer period is specified by a particular permit provision.

9.7 Annual Emissions Report

The Permittee shall submit an annual emissions report to the Illinois EPA, Compliance Section no later than May 1 of the following year, as required by 35 IAC Part 254.

9.8 Requirements for Compliance Certification

Pursuant to Section 39.5(7)(p)(v) of the Act, the Permittee shall submit annual compliance certifications. The compliance certifications shall be submitted no later than May 1 or more frequently as specified in the applicable requirements or by permit condition. The compliance certifications shall be

submitted to the Air Compliance Section, Air Regional Field Office, and USEPA Region 5 – Air Branch. The addresses for the submittal of the compliance certifications are provided in Condition 8.6.4 of this permit.

a. The certification shall include the identification of each term or condition of this permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.

b. All compliance certifications shall be submitted to USEPA Region 5 in Chicago as well as to the Illinois EPA.

c. All compliance reports required to be submitted shall include a certification in accordance with Condition 9.9.

9.9 Certification

Any document (including reports) required to be submitted by this permit shall contain a certification by a responsible official of the Permittee that meets the requirements of Section 39.5(5) of the Act [Section 39.5(7)(p)(i) of the Act]. An example Certification by a Responsible Official is included as an attachment to this permit.

9.10 Defense to Enforcement Actions

9.10.1 Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit [Section 39.5(7)(o)(ii) of the Act].

9.10.2 Emergency Provision

a. An emergency shall be an affirmative defense to an action brought for noncompliance with the technology-based emission limitations under this permit if the following conditions are met through properly signed, contemporaneous operating logs, or other relevant evidence:

i. An emergency occurred as provided in Section 39.5(7)(k) of the Act and the Permittee can identify the cause(s) of the emergency. Normally, an act of God such as lightning or flood is considered an emergency;

ii. The permitted source was at the time being properly operated;

iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and

iv. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or regulations in this permit.

b. This provision is in addition to any emergency or upset provision contained in any applicable requirement. This provision does not relieve a Permittee of any reporting obligations under existing federal or state laws or regulations.

9.11 Permanent Shutdown

This permit only covers emission units and control equipment while physically present at the indicated source location(s). Unless this permit specifically provides for equipment relocation, this permit is void for the operation or activity of any item of equipment on the date it is removed from the permitted location(s) or permanently shut down. This permit expires if all equipment is removed from the permitted location(s), notwithstanding the expiration date specified on this permit.

9.12 Reopening and Reissuing Permit for Cause

9.12.1 Permit Actions

This permit may be modified, reopened, and reissued, for cause pursuant to Section 39.5(15) of the Act. The filing of a request by the Permittee for a permit modification, revocation, and reissuance, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition [Section 39.5(7)(o)(iii) of the Act].

9.12.2 Reopening and Revision

This permit must be reopened and revised if any of the following occur [Section 39.5(15)(a) of the Act]:

a. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit;

b. Additional requirements become applicable to an affected source for acid deposition under the acid rain program;

c. The Illinois EPA or USEPA determines that this permit contains a material mistake or inaccurate statement when establishing the emission standards or limitations, or other terms or conditions of this permit; and

d. The Illinois EPA or USEPA determines that this permit must be revised to ensure compliance with the applicable requirements of the Act.

9.12.3 Inaccurate Application

The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation under Section 39.5(15)(b) of the Act.

9.12.4 Duty to Provide Information

The Permittee shall furnish to the Illinois EPA, within a reasonable time specified by the Illinois EPA any information that the Illinois EPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to the Illinois EPA copies of records required to be kept by this permit, or for information claimed to be confidential, the Permittee may furnish such records directly to USEPA along with a claim of confidentiality [Section 39.5(7)(o)(v) of the Act].

9.13 Severability Clause

The provisions of this permit are severable, and should any one or more be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected. The rights and obligations of the Permittee shall be construed and enforced as if this permit did not contain the particular provisions held to be invalid and the applicable requirements underlying these provisions shall remain in force [Section 39.5(7)(i) of the Act].

9.14 Permit Expiration and Renewal

The right to operate terminates on the expiration date unless the Permittee has submitted a timely and complete renewal application. For a renewal to be timely it must be submitted no later than 9 and no sooner than 12 months prior to expiration. The equipment may continue to operate during the renewal period until final action is taken by the Illinois EPA, in accordance with the original permit conditions [Section 39.5(5)(l), (n), and (o) of the Act].

10.0 ATTACHMENTS

10.1 Attachment 1 - Example Certification by a Responsible Official

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____

Name: _____

Official Title: _____

Telephone No.: _____

Date Signed: _____

10.2 Attachment 2 - Guidance on Revising This Permit

The Permittee must submit an application to the Illinois EPA using the appropriate revision classification in accordance with Sections 39.5(13) and (14) of the Act and 35 IAC 270.302. Specifically, there are currently three classifications for revisions to a CAAPP permit. These are:

1. Administrative Permit Amendment;

2. Minor Permit Modification; and

3. Significant Permit Modification.

The Permittee must determine, request, and submit the necessary information to allow the Illinois EPA to use the appropriate procedure to revise the CAAPP permit. A brief explanation of each of these classifications follows.

1. Administrative Permit Amendment

- Corrects typographical errors;
- Identifies a change in the name, address, or phone number of any person identified in the permit, or provides a similar minor administrative change at the source;
- Requires more frequent monitoring or reporting by the Permittee;
- Allows for a change in ownership or operational control of the source where no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new Permittees has been submitted to the Illinois EPA. This shall be handled by completing form 272-CAAPP, REQUEST FOR OWNERSHIP CHANGE FOR CAAPP PERMIT; or
- Incorporates into the CAAPP permit a construction permit, provided the conditions of the construction permit meet the requirements for the issuance of CAAPP permits.

2. Minor Permit Modification

- Do not violate any applicable requirement;
- Do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit;

- Do not require a case-by-case determination of an emission limitation or other standard, or a source-specific determination of ambient impacts, or a visibility or increment analysis;

- Do not seek to establish or change a permit term or condition for which there is no corresponding underlying requirement and which avoids an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:

    - A federally enforceable emissions cap assumed to avoid classification as a modification under any provision of Title I of the CAA; and

    - An alternative emissions limit approved pursuant to regulations promulgated under Section 112(i)(5) of the CAA.

- Are not modifications under any provision of Title I of the CAA;

- Are not required to be processed as a significant permit modification; and

- Modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches.

An application for a minor permit modification shall include the following:

- A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;

- The source's suggested draft permit/conditions;

- Certification by a responsible official that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and

- Information as contained on form 271-CAAPP, MINOR PERMIT MODIFICATION FOR CAAPP PERMIT for the Illinois EPA to use to notify USEPA and affected States.

3. Significant Permit Modification

- Applications that do not qualify as either minor permit modifications or as administrative permit amendments;

- Applications requesting a significant change in existing monitoring permit terms or conditions;

- Applications requesting a relaxation of reporting or recordkeeping requirements; and

- Cases in which, in the judgment of the Illinois EPA, action on an application for modification would require decisions to be made on technically complex issues.

An application for a significant permit modification shall include the following:

- A detailed description of the proposed change(s), including all physical changes to equipment, changes in the method of operation, changes in emissions of each pollutant, and any new applicable requirements which will apply as a result of the proposed change. Note that the Permittee need only submit revised forms for equipment and operations that will be modified.

The Illinois EPA requires the information on the following appropriate forms to be submitted in accordance with the proper classification:

- Form 273-CAAPP, REQUEST FOR ADMINISTRATIVE PERMIT AMENDMENT FOR CAAPP PERMIT; or

- Form 271-CAAPP, MINOR PERMIT MODIFICATION FOR CAAPP PERMIT; or

- Form 200-CAAPP, APPLICATION FOR CAAPP PERMIT (for significant modification).

Application forms can be obtained from the Illinois EPA website at http://www.epa.state.il.us/air/forms.

Note that the request to revise the permit must be certified for truth, accuracy, and completeness by a responsible official.

Note that failure to submit the required information may require the Illinois EPA to deny the application. The Illinois EPA reserves the right to require that additional information be submitted as needed to evaluate or take final action on applications pursuant to Section 39.5(5)(g) of the Act and 35 IAC 270.305.

Illinois Environmental Protection Agency
Division Of Air Pollution Control -- Permit Section
P.O. Box 19506
Springfield, Illinois 62794-9506

Application For Construction Permit (For CAAPP Sources Only)	**For Illinois EPA use only**
	I.D. number:
	Permit number:
	Date received:

This form is to be used by CAAPP sources to supply information necessary to obtain a construction permit. Please attach other necessary information and completed CAAPP forms regarding this construction/modification project.

Source Information

1. Source name:		
2. Source street address:		
3. City:		4. Zip code:
5. Is the source located within city limits?		☐ Yes ☐ No
6. Township name:	7. County:	8. I.D. number:

Owner Information

9. Name:		
10. Address:		
11. City:	12. State:	13. Zip code:

Operator Information (if different from owner)

14. Name		
15. Address:		
16. City:	17. State:	18. Zip code:

Applicant Information

19. Who is the applicant? ☐ Owner ☐ Operator	20. All correspondence to: (check one) ☐ Owner ☐ Operator ☐ Source
21. Attention name and/or title for written correspondence:	
22. Technical contact person for application:	23. Contact person's telephone number:

This Agency is authorized to require and you must disclose this information under 415 ILCS 5/39. Failure to do so could result in the application being denied and penalties under 415 ILCS 5 et seq. It is not necessary to use this form in providing this information. This form has been approved by the forms management center.

Summary Of Application Contents

24.	Does the application address whether the proposed project would constitute a new major source or major modification under each of the following programs: a) Non-attainment New Source Review – 35 IAC Part 203; b) Prevention of Significant Deterioration (PSD) – 40 CFR 52.21; c) Hazardous Air Pollutants: Regulations Governing Constructed or Reconstructed Major Sources – 40 CFR Part 63?	☐ Yes ☐ No
25.	Does the application identify and address all applicable emissions standards, including those found in the following: a) Board Emission Standards – 35 IAC Chapter I, Subtitle B; b) Federal New Source Performance Standards – 40 CFR Part 60; c) Federal Standards for Hazardous Air Pollutants – 40 CFR Parts 61 and 63?	☐ Yes ☐ No
26.	Does the application include a process flow diagram(s) showing all emission units and control equipment, and their relationship, for which a permit is being sought?	☐ Yes ☐ No
27.	Does the application include a complete process description for the emission units and control equipment for which a permit is being sought?	☐ Yes ☐ No
28.	Does the application include the information as contained in completed CAAPP forms for all appropriate emission units and air pollution control equipment, listing all applicable requirements and proposed exemptions from otherwise applicable requirements, and identifying and describing any outstanding legal actions by either the USEPA or the Illinois EPA? Note: The use of "APC" application forms is not appropriate for applications for CAAPP sources. CAAPP forms should be used to supply information.	☐ Yes ☐ No
29.	If the application contains TRADE SECRET information, has such information been properly marked and claimed, and have two separate copies of the application suitable for public inspection and notice been submitted, in accordance with applicable rules and regulations?	☐ Yes ☐ No ☐ Not Applicable, No TRADE SECRET information in this application

Note 1: Answering “No” to any of the above may result in the application being deemed incomplete.

Signature Block

This certification must be signed by a responsible official. Applications without a signed certification will be returned as incomplete.

30. I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in this application are true, accurate and complete.

Authorized Signature:

BY:

_____ _____

AUTHORIZED SIGNATURE TITLE OF SIGNATORY

_____ _____ / _____ / _____

TYPED OR PRINTED NAME OF SIGNATORY DATE

Note 2: An operating permit for the construction/modification permitted in a construction permit must be obtained by applying for the appropriate revision to the source’s CAAPP permit, if necessary.

10.4 Attachment 4 - Guidance on Renewing This Permit

Timeliness - Pursuant to Section 39.5(5)(n) of the Act and 35 IAC 270.301(d), a source must submit to the Illinois EPA a complete CAAPP application for the renewal of a CAAPP permit not later than 9 months before the date of permit expiration of the existing CAAPP permit in order for the submittal to be deemed timely. Note that the Illinois EPA typically sends out renewal notices approximately 18 months prior to the expiration of the CAAPP permit.

The CAAPP application must provide all of the following information in order for the renewal CAAPP application to be deemed complete by the Illinois EPA:

1. A completed renewal application form 200-CAAPP, APPLICATION FOR CAAPP PERMIT.

2. A completed compliance plan form 293-CAAPP, COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE FOR CAAPP PERMIT.

3. A completed compliance certification form 296-CAAPP, COMPLIANCE CERTIFICATION, signed by the responsible official.

4. Any applicable requirements that became effective during the term of the permit and that were not included in the permit as a reopening or permit revision.

5. If this is the first time this permit is being renewed and this source has not yet addressed CAM, the application should contain the information on form 464-CAAPP, COMPLIANCE ASSURANCE MONITORING (CAM) PLAN.

6. Information addressing any outstanding transfer agreement pursuant to the ERMS.

7. a. If operations of an emission unit or group of emission units remain unchanged and are accurately depicted in previous submittals, the application may contain a letter signed by a responsible official that requests incorporation by reference of existing information previously submitted and on file with the Illinois EPA. This letter must also include a statement that information incorporated by reference is also being certified for truth and accuracy by the responsible official's signing of the form 200-CAAPP, APPLICATION FOR CAAPP PERMIT and the form 296-CAAPP, COMPLIANCE CERTIFICATION. The boxes should be marked yes on form 200-CAAPP, APPLICATION FOR CAAPP PERMIT, as existing information is being incorporated by reference.

b. If portions of current operations are not as described in previous submittals, then in addition to the information above for operations that remain unchanged, the application must contain the necessary information on all changes, e.g., discussion of changes, new or revised CAAPP forms, and a revised fee form 292-CAAPP, FEE DETERMINATION FOR CAAPP PERMIT, if necessary.

8. Information about all off-permit changes that were not prohibited or addressed by the permit to occur without a permit revision and the information must be sufficient to identify all applicable requirements, including monitoring, recordkeeping, and reporting requirements, for such changes.

9. Information about all changes made under 40 CFR 70.4(b)(12)(i) and (ii) that require a 7-day notification prior to the change without requiring a permit revision.

The Illinois EPA will review all applications for completeness and timeliness. If the renewal application is deemed both timely and complete, the source shall continue to operate in accordance with the terms and conditions of its CAAPP permit until final action is taken on the renewal application.

Notwithstanding the completeness determination, the Illinois EPA may request additional information necessary to evaluate or take final action on the CAAPP renewal application. If such additional information affects your allowable emission limits, a revised form 292-CAAPP, FEE DETERMINATION FOR CAAPP PERMIT must be submitted with the requested information. The failure to submit to the Illinois EPA the requested information within the time frame specified by the Illinois EPA, may force the Illinois EPA to deny your CAAPP renewal application pursuant to Section 39.5 of the Act.

Application forms may be obtained from the Illinois EPA website at http://www.epa.state.il.us/air/forms.html.

If you have any questions regarding this matter, please contact a permit analyst at 217/782-2113.

Mail renewal applications to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Permit Section (MC 11)
P.O. Box 19506

Springfield, Illinois 62794-9506

DWH:psj